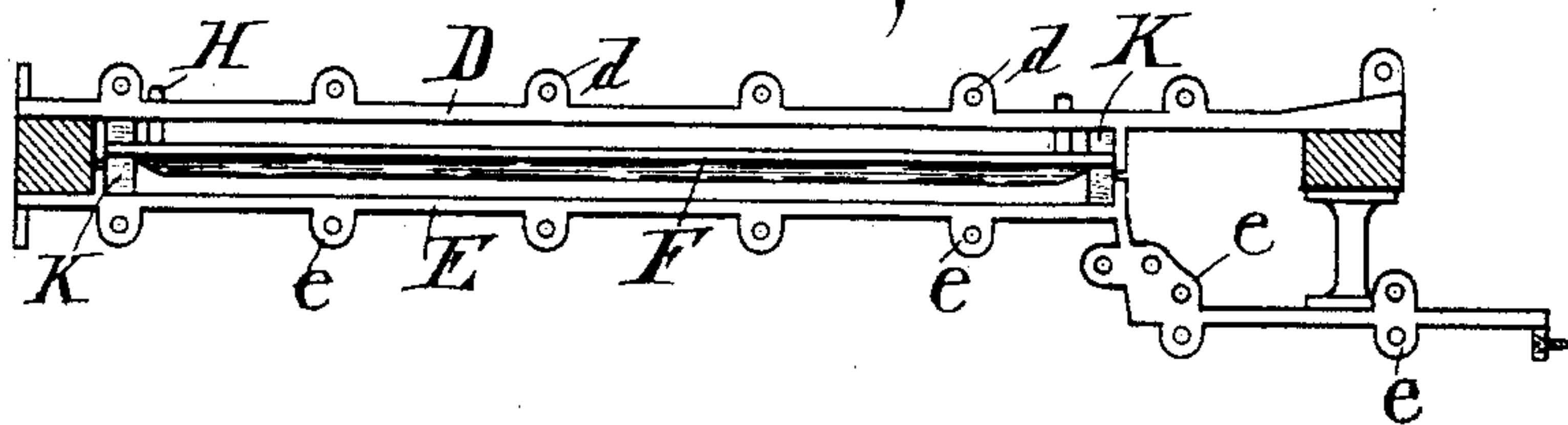
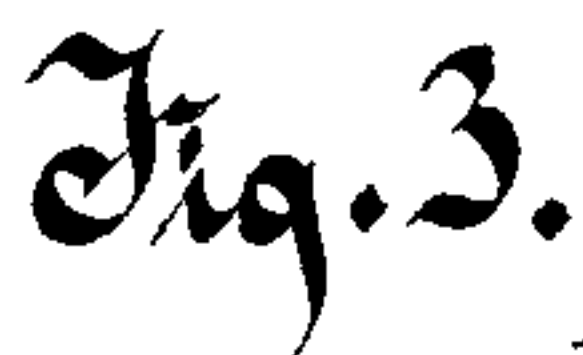


W. ROHLFING, Jr.
PIANO FORTE.

Patented Apr. 12, 1892.



Witnesses.

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UNITED STATES PATENT OFFICE.

WILLIAM ROHLFING, JR., OF MILWAUKEE, WISCONSIN.

PIANO-FORTE.

SPECIFICATION forming part of Letters Patent No. 472,588, dated April 12, 1892.

Application filed December 12, 1891. Serial No. 414,791. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM ROHLFING, Jr., of Milwaukee, in the county of Milwaukee and State of Wisconsin, have invented a new and useful Improvement in Piano-Fortes, of which the following is a description, reference being had to the accompanying drawings, which are a part of this specification.

My invention has relation to improvements in piano-fortes, and more particularly to that portion thereof known as the "skeleton" or "body."

It consists in the improved construction and combination of parts, as hereinafter more fully set forth and described.

In the accompanying drawings, forming a part of this specification, Figure 1 is a vertical section of an upright piano, taken on a plane indicated by the line 1 1 of Fig. 2. Fig. 2 is a vertical section at right angles to Fig. 1 on the line 2 2 of said figure; and Fig. 3 is an end elevation with a portion of the wood-work in section, showing a slight modification in order to adapt the invention to square and grand pianos.

Like letters of reference refer to like parts throughout the several views.

Referring to Figs. 1 and 2 of the drawings, the letter A indicates the case of a piano-forte, B B the side pieces of the keyboard, and C C the lower horizontal base-pieces, all of which, being of the ordinary and usual construction, require no extensive description.

My improved framing consists of outer and inner plates D and E, respectively, having interposed therebetween a sounding-board F. Frame D corresponds to those used for piano-fortes in general, while frame E is intended to take the place of the wood skeleton used in piano-fortes of to-day.

In many of the common forms of construction various parts of the case are secured to the skeleton or body by glue or analogous adhesive material. This is not only faulty in failing to provide against the secure and firm retention of the skeleton or body, but furthermore precludes the possibility of removing the same, which is often found quite desirable in practice. My construction, however, enables a purchaser to make his selection in accordance with his preferences, both as to tone as well as the general style of the wood-work

composing the case of the instrument. In the styles of pianos just referred to it has been found impossible to select with this in view owing to the fact that parts of the case were glued permanently to the skeleton or body. It followed, therefore, that if the appearance of an instrument, as disclosed by the style or quality of wood-work, pleased a prospective purchaser, but at the same time dissatisfaction was expressed with its tone, difficulty was experienced in providing against this contingency. In my improved construction, however, the parts of the case are fastened to the skeleton or body by means of screws or bolts passing through angular lugs or projections *d* and *e*, extending from the framings and entering the wood-work of the case, thereby providing for the ready removal of the skeleton or body from one case to another. As the inner frame is located in close proximity to the back of the case, the lugs thereof are of course necessarily somewhat shorter than those of the outer frame. It will be noticed that two of the lugs *d'* *d'* at opposite ends of this outer frame are widened somewhat, so as to secure a broad bearing-surface against the side pieces B B of the keyboard, while the top and bottom of said side pieces have secured thereto lugs *d*² *d*². Similar lugs *d*³ *d*³ and *d*⁴ *d*⁴ extend from the lower portion of the frame D, but in this instance are secured to the lower outstanding base-pieces C C upon the sides and tops thereof. It is apparent that the framings are thus attached most securely in position with but the slightest danger of becoming loose, while at the same time they may be readily removed and replaced by others. It is of course obvious that instead of making a series of lugs, as above described, one continuous flange may be employed without departing from the spirit and scope of my invention. The construction shown, however, is preferable, inasmuch as the same results in a saving both in material and weight.

The sounding-board has projecting therefrom a bridge G, and also bridges H, H, and I. The bridges pass through appropriate slots therefor in the framing and are glued directly to the sounding-board. In the usual makes or styles of pianos the bridge corresponding to bridge H is glued to the wrest-plank or cast

onto the metal frame, which in practice has been found to be a disadvantage, inasmuch as the rib has a tendency to cause a metallic sound. In order to overcome this and produce a superior quality of tone, I have devised the construction above described, and clearly shown in the drawings, whereby that part of the string J which is struck by the piano-hammer is allowed to vibrate between two sounding-board bridges, both of which are glued directly to said sounding-board. The sounding-board is supported in position by means of two blocks K K, interposed between the framings and receiving-screws L.

Fig. 3 illustrates the manner in which the skeleton or body is secured in place in a square or grand piano. As will be readily seen, this only necessitates such a slight change as would suggest itself to any mechanic skilled in the art. In fact, my invention is equally applicable to all forms and styles of piano-fortes, grand, upright, and square.

Having thus described my invention, what I claim, and desire to secure by Letters Patent of the United States, is—

1. In a piano-forte, the combination, with a casing, of a frame consisting of outer and inner plates provided with lugs projecting laterally therefrom and adapted to be secured to the casing by screws, substantially as set forth.

2. In a piano-forte, the combination, with

the case thereof, of a framing having a series of lugs or projections for attachment to said body, lugs engaging the side, top, and bottom of the side pieces of the keyboard, and lugs engaging the side and top of the supporting base-pieces, substantially as set forth.

3. In a piano-forte, the combination of a frame, a sounding-board, bridges secured thereto and passing through slots in the framing, a set of strings having their opposite ends secured to the portions of two of the bridges projecting from opposite ends of the sounding-board, and another set of strings having their opposite ends secured to the portions of the other bridges projecting from opposite ends of the sounding-board, the parts of the strings which are struck by the hammer allowed to vibrate between the bridges to which they are secured, substantially as set forth.

4. In a piano-forte, the combination of inner and outer framings, a sounding-board interposed therebetween, and blocks at the edges and on opposite sides of the sounding-board to receive screws, substantially as set forth.

In testimony whereof I affix my signature in presence of two witnesses.

WILLIAM ROHLFING, JR.

Witnesses:

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